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CAS, SERVICE DOCTRINE, AND THE OPERATIONAL LEVEL OF WAR

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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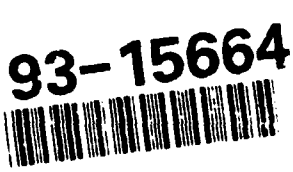

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During the past decade, the US has utilized rapid deployment forces on an ever increasing basis in response to emerging crises. These forces have been employed as stand alone forces in lesser regional contingencies and as an enabling force during the last major regional contingency. Consistent with airlift limitations, many of these force packages are configured with light organic weapons and rely on CAS for immediate heavy firepower. Yet, Army and Air Force doctrines fail to recognize the essential role CAS plays during an operation. Over the years this basic disconnect in service doctrine has given rise to heated debate between the two services concerning adequate CAS for the infantryman. Indeed, the most recent version of Air Force doctrine further de-emphasizes the use of CAS. With a view on recent trends in force employment, the current flaws in CAS service doctrine will be exposed, the impact which CAS has on the operational level of war will be examined, and a solution which rectifies doctrinal shortfalls through renewed CAS emphasis will be offered.

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During the past decade, the US has utilized rapid deployment forces on an ever increasing basis in response to emerging crises. These forces have been employed as stand alone forces in lesser regional contingencies and as an enabling force during the last major regional contingency. Consistent with airlift limitations, many of these force packages are configured with light organic weapons and rely on CAS for immediate heavy firepower. Yet, Army and Air Force doctrines fail to recognize the essential role CAS plays during an operation. Over the years this basic disconnect in service doctrine has given rise to heated debate between the two services concerning adequate CAS for the infantryman. Indeed, the most recent version of Air Force doctrine further de-emphasizes the use of CAS. With a view on recent trends in force employment, the current flaws in CAS service doctrine will be exposed, the impact which CAS has on the operational level of war will be examined, and a solution which rectifies doctrinal shortfalls through renewed CAS emphasis will be offered.

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CHAPTER I

INTRODUCTION

Close Air Support (CAS) for US Army forces has long been an issue which has generated heated debate. Roles and missions assigned to US Armed Forces charges the US Air Force with primary responsibility for providing the Army with CAS. Central to the debate is whether CAS rendered by the Air Force is responsive and effective, and whether proper emphasis is placed on its execution. Emphasis translates into resources, and where there is disagreement on expenditures friction develops. However the larger issue, and the root of the debate, can be traced back to the priority which the CAS mission receives. This is a function of service doctrine and, since doctrine determines the way forces fight, it has a significant impact on the operational level of war.

The Air Force is responsible for a host of missions including air superiority, deep interdiction, battlefield preparation, and finally CAS. Air Force doctrine holds that without some degree of air superiority (counter air) the remaining missions are not executable without exposing forces to substantial risks. Air interdiction (AI), carried out against targets well beyond the Forward Line of Troops, is seen strictly as a theater tool capable of contributing directly to operational objectives. Battlefield air interdiction (BAI), a subset of AI,

becomes a means of neutralizing or destroying enemy forces before they come in contact with friendly forces. CAS is viewed as impacting only the tactical level of war and, as a consequence, has been relegated to last priority. Because Air Force doctrine follows this line of reasoning, air warfare strategy is sequenced accordingly. While this strategy seemingly dovetails with the Army's concept of deep, rear, and close operations, it has lost sight of the relevance which CAS has on the operational level and the benefits which the CINC receives when his ground forces are provided adequate CAS.

The most recent debate occurred a few years back and centered over a proposal for retiring the A-10 and using the F-16 as a suitable substitute. What fueled the debate was the fact that the A-10 was a single mission (CAS) aircraft while the F-16 was a multi-mission aircraft. Central to the Army's argument for a dedicated CAS aircraft was the fear that a multi-mission aircraft could be "reassigned at any time by the Air Force to fight air-to-air battles" thereby denuding ground forces of essential firepower.[1] The Air Force uses single mission aircraft for both air superiority and interdiction; the logical question, and one which the Army repeatedly asked, was why a single mission aircraft could not be retained or developed for the CAS mission. The question remains unanswered.

The CAS debate has lain somewhat dormant for the past two years; a function of the stunning results which air warfare achieved during Desert Storm. But since all wars are not fought

under similar conditions, it is reasonable to assume that the current problem of adequate CAS support remains unresolved. The solution to end the CAS debate follows two logical alternatives, both of which place greater emphasis on the importance of CAS. The Air Force can retain the mission and rethink their doctrine with regards to CAS, or the mission can be transferred to the Army. Both proposals carry with them the potential for significant budgetary ramifications but, in the final analysis, the option selected must put an end to the friction which has developed between the two services.

To reframe the issue, the Army has lost confidence in the Air Force's ability to provide adequate CAS. To better understand why this has occurred, Chapter II traces the historical background of the CAS debate. Chapter III reveals the shortcomings in service doctrine which tend to fuel the debate. Chapter IV examines how CAS affects the operational level of war. Finally, a revised CAS doctrine is suggested; one which is more appropriate in today's environment of employing rapid reaction troops in a crisis response and one which offers the CINC more freedom of action.

CHAPTER II

HISTORICAL BACKGROUND

To put the underlying cause of the CAS problem in perspective, a short, succinct look at the historical evolution of Army aviation and air support for ground forces is appropriate. Since the dawn of aviation man has not only improved upon the capabilities of aerial equipment but he has also expanded upon its uses. Armed services the world over quickly grasped aviation's utility for military applications exploiting the aircraft's speed and flexibility; first as observation and reconnaissance platforms, and later as a means of applying firepower. Shortly after its inception, it became evident that aviation could be employed as another tool in achieving operational objectives.

Enter the US Army's aviation component. Initially a branch of the Signal Corps, it later developed into the Army Air Corps and finally the Army Air Force. During World War I Army aviation firepower was directed at both airborne targets and enemy ground forces. Ground commanders in the field viewed the aircraft as essentially a tactical weapon for use in the battle field. In World War II, as increased range and payload made it possible to direct airborne firepower at distant targets, the aircraft worked its way into the strategic bombing arena. As these expanded roles opened in aviation, additional resources were required to meet them. Inevitably questions arose as to where these

resources could best be applied in order to enhance the overall war effort. Thus was the seed of the CAS debate planted. Those in the infantry branch were focused on enemy ground targets in the immediate battle area with aviation contributing a significant volume of firepower to defeat local forces. On the other hand, those in the aviation branch took a broader view. Advocating those theories articulated by Douhet, that air warfare had the potential to contribute "decisively" to the war effort, the Army Air Force sought to divorce itself from the Army as early as 1943.[1] The goal was to establish itself as a separate branch of the Armed Forces free to develop doctrine which revolved around these ideas. Specifically, this early doctrine maintained that destroying targets beyond the local battlefield would "eventually render [the enemy] powerless" and:

> *That airpower, capitalizing upon its inherent long-range strategic capabilities and operating in sufficient strength, could accomplish this objective.*
> *That land-based aircraft, with emphasis on the long-range, high altitude heavy bomber, would be the backbone of our air force, and that super bombers would be required.*[2]

These basic beliefs would play heavily in molding a new Air Force in the post World War II era.

Under the National Security Act of 1947, the Army Air Force became an autonomous service and emerged as the US Air Force. Pursuing a doctrine more in line with Douhet's theory of air warfare, the Air Force was no longer compelled to be held in direct support of Army infantry units and instead centralized control, under Air Force leadership, eventually became the order

of the day.[3] The road to centralized control did not end in 1947. In 1948, Secretary of Defense James Forrestal assembled the service chiefs in March at Key West and then again in August at Newport. A framework which delineated the roles and missions for each branch of the armed services was established with the Army loosing most of its aviation assets. The *quid pro quo* arrangement was that "the Army and Air Force agreed to cooperate with each other as a team on joint missions" with the Air Force providing air support for Army forces.[4] In 1957, Department of Defense Directive 5160.22 solidified this arrangement by stripping the Army of all fixed wing aircraft capable of delivering sizeable payloads thus making ground commanders totally dependent on the Air Force for CAS under this "team" concept.[5]

The historical track record for this new arrangement provides evidence that this split far from optimized CAS for Army ground forces. The reasons were clear; the Air Force focused on exploiting technology and developing platforms which it believed would expand its theater role. This general direction propelled aviation to new heights but largely neglected the needs of the infantryman. Those needs were responsive, effective firepower where and when needed. In both Korea and Vietnam problems surfaced in two critical areas with regard to CAS; coordination between ground forces and supporting aircraft, and aircraft effectiveness.[6] Hence, over the years a gradual mistrust developed between the two services. The natural fallout was the

Army's active participation in the development of the helicopter, a move which eventually resulted in an enormous inventory of rotary wing aircraft at substantial cost. Although a large portion of this fleet served as organic lift for battlefield maneuvering, a sizeable amount provided close in fire support to maximize firepower and to fill the gap where CAS was considered inadequate.[7]

Desert Storm stands as a model for the importance of air warfare in armed conflict. For 43 days Iraqi forces were pounded with air strikes enabling follow-on allied ground forces the ability to achieve all operational objectives and victory in 100 hours with minimum casualties. However, one cannot point to Desert Storm alone as convincing evidence which vindicates Air Force CAS as a finely honed method of applying firepower. While communications between ground units and supporting aircraft improved dramatically since Korea and Vietnam, coordination remained a problem and several cases of fratricide occurred from air delivered weapons.[8] But in a broader sense the volume of actual CAS missions represented only a minute fraction of the total sorties flown in Desert Storm. Initial air to ground missions involved AI and BAI. Even after the ground campaign commenced with troops advancing toward objectives, most fixed wing sorties were directed at BAI targets. So while Desert Storm from an air warfare perspective was a resounding success, the Air Force's ability to provide responsive and effective CAS remains in doubt. The CAS debate has only become dormant for the moment.

CHAPTER III

SERVICE DOCTRINE SHORTCOMINGS

In the classical sense, there are three fixed wing mission areas which bring fire to bear: counter air, air interdiction, and close air support. The significance of each mission area is subject to interpretation however, service doctrine will largely determine what priority they receive. From an operational perspective, they all have a common goal to support friendly forces. Regardless of whether a specific mission area supports the ground scheme of maneuver directly or indirectly, all are essential over the course of an operation or campaign and all influence the operational level of war. But the current trend on the part of the CINC's is to call on force packages which can rapidly deploy.[1] By their very nature, these forces are generally light on organic heavy weapons and are becoming more reliant on CAS to fill the void in firepower. Unfortunately, it is in this area where Air Force and Army force packages fall short of the mark principally because both service doctrines de-emphasize CAS. An analysis of the respective service doctrines supports this assertion.

The Army's war fighting doctrine, termed AirLand Battle, treats organic rotary wing and fixed wing aviation separately. Organic "aviation units participate in combined arms operations . . ." and are integral to the Army's scheme of fire and maneuver finding greatest utility in close operations.[2] Attack

helicopters are focused on the anti-armor role, air calvary helicopters on reconnaissance and surveillance roles, and combat support helicopters on the air assault role. In contrast, fixed wing aviation is set apart and there is a general de-emphasis on its usage to directly support the scheme of maneuver. Army doctrine points out that fixed wing "air forces are normally more efficiently used to attack in depth . . . ."[3] With the bulk of air warfare being carried out in depth (read AI), the manual cautions that "battlefield situations may interrupt this plan of attack [but] air and land commanders must remain committed to their coordinated actions and must not allow the impact of airpower to be diverted away from the main objective."[4] The interpretation is that assets dedicated to AI or BAI should not be siphoned off for CAS missions during the course of an operation. True, the manual describes the importance of CAS in terms of fire and maneuver during close operations, but current doctrine tends to cloud the differentiation between supported and supporting commanders.

The Air Force is even more explicit in de-emphasizing CAS. Air Force doctrine maintains that "close air support rarely creates campaign-level effects" and "is the least efficient application of aerospace forces . . . ."[5] Mission areas have become prioritized based on their "importance to (1) the war, (2) the campaign, and (3) the battle" and air commanders are cautioned that "[they] should be alert for potential diversion of aerospace forces to missions of marginal importance."[6]

Surprisingly, the JCS doctrinal usage of CAS against "hostile targets which are in close proximity to friendly forces . . ."[7] appears to have fallen by the wayside and instead the Air Force has adopted a doctrine which holds that CAS is used against "enemy forces that are in proximity to friendly forces." (emphasis added)[8] Weighing these statements together, a perception develops that the Air Force is rapidly distancing itself from CAS and evidently blending this mission area with BAI. Blending CAS and BAI serves to further de-emphasize CAS operations and focuses airpower on targets in depth.

Air Force doctrine maintains that air warfare should be used as an operational tool. While there is no reason to dispute this claim, at the same time the Air Force holds that CAS has primarily tactical implications. This view is fundamentally flawed. In any operation, the effect that CAS has on the operational level of war is cumulative in much the same way that battles, air strikes, or combat air patrols affect the commander's ability to achieve operational objectives. Admittedly, the results of CAS may not produce immediate, decisive results but the same can be said for all air operations. For example, during World War II strategic bombing missions carried out by allied forces did not produce the immediate effects which many had hoped. Germany's industrial base which fueled the wehrmacht took years to dismantle by bombardment. In contrast, Iraq had no such industrial capacity. The 43 days of intense bombardment disrupted a one-time standing army whose

equipment was purchased from oil revenues and not an army dependent upon a massive manufacturing infrastructure for sustainment. The point here is that CAS is as equally important in the overall campaign plan as is counter air and AI missions; a point which has been lost on the Air Force in its Aerospace doctrine. What is different between these mission areas is how they are sequenced during regional conflicts and only in this regard does CAS take a lesser billing.

The most convincing form of evidence which demonstrates a general de-emphasis on CAS comes from senior Air Force officials themselves who assert that "in future wars . . . the Air Force's primary mission will be hitting high-value strategic targets behind enemy lines" and "every other mission, including CAS, will have to take lower priority."[9] Others have pointed out that "as far as the Air Force is concerned, its combat interest in the mission of close air support is not very high" and "the mission[s] of . . . counter air . . . interdiction and battlefield interdiction are of such vital importance that the Air Force would . . . rather easily give up [CAS] if ordered to do so . . . ."[10] These attitudes seem to mirror current Air Force doctrine but if this is the case, CAS availability to ground troops will always be in doubt; exactly what the Army fears most. Allegiance to this doctrine can have serious repercussions. Consider for example, the Joint Force Air Component Commander (JFACC) who advises the Joint Force Commander (JFC) on targeting priorities.[11] Since the JFACC is generally an Air Force officer

there is a strong possibility that during an operation, targets in depth may receive more attention than targets which are in close proximity to friendly troops. This course of action may not be in the best interest of the JFC nor does it necessarily enhance his ability to achieve his operational objectives. Battles could be jeopardized and in turn bring an operation to a premature culminating point with devastating affects.

CAS is not the only mission area that has become a casualty in the past three decades to a defunct doctrine. Reflect for a moment on that once bastardized mission area called strategic lift. These days no one, not even Congress, discounts the absolute necessity of strategic lift. If troops, equipment, and supplies cannot be transported to the theater of operations, there will be no follow-on battles, no operational objectives achieved, no strategic goals realized, and no wars won. This holds true regardless of the emphasis placed on counter air, AI, or CAS. The bottom line is that the priority placed on CAS hinges on the type of operation which the forces are called on by the CINC to execute. Doctrine must recognize this basic fact.

CHAPTER IV

OPERATIONAL BENEFITS OF CAS

The operational benefits of CAS span each level of war and all stages of conflict. "CAS focuses combat power over time and space against theater objectives" and "is essential at both the tactical and operational levels of war."[1] True, some have argued that the Army could perform its own form of CAS with its fleet of armed helicopters. Others argue that enemy targets could be destroyed with organic firepower (e.g., TOW, rockets, artillery) indigenous to the Army. But if CAS is essential at the operational level of war, then the principles of mass and economy of force suggest that all means of combat be brought to bear during an operation, including fixed wing aviation's share of firepower.

The current trend of using rapid response troops serves to elevate the importance which CAS has on influencing the outcome of future operations. This holds especially true at the lower end of the spectrum of conflict. For example, in operation Urgent Fury air superiority was generally uncontested and counter air operations were non-existent. Since Grenada's infrastructure was not a target, AI operations were not applicable. On the other hand, CAS operations had more utility; albeit somewhat limited in this particular example given the minimum resistance offered by threat forces. However, it is not difficult to extrapolate upon an operation of this nature and realize that in

many lesser regional contingencies, CAS becomes the predominant means of exercising air warfare. In the case where light ground forces are to be deployed, the situation can become acute with CAS representing the only form of heavy firepower available. Void of heavy organic weapons and divorced from rotary wing fire support due to deployment restrictions or limitations, CAS could substantially influence an operation.

The same corollary can be drawn for the initial deployment phase in a major regional contingency. Once again, CAS may be the only heavy firepower initially available to the first forces sequenced in theater. In operation Desert Storm, the US initially inserted highly mobile forces into Saudi Arabia as a "trip wire" following the Iraqi invasion of Kuwait.[2] Some of the first forces to deploy, elements of the 82nd Division, referred to themselves as "speed bumps" capable of offering only a limited form of resistance against a possible enemy advance to the south. Had the scenario been altered and Iraqi forces actually surged into Saudi Arabia prior to the buildup of coalition forces, CAS would have been critical in shaping the operation.

Finally, in a theater of operations that is not conducive to mechanized infantry or armor, CAS once again may play the leading role in delivering heavy firepower. And while CAS may not be a panacea for heavy firepower when terrain prohibits the use of mechanized equipment, it can and will afford some form of support for the ground forces due to an aircraft's inherent flexibility.

The examples cited above indicate that operational objectives do not always hinge on air warfare involving deep operations. Instead, there are many instances during an operation when emphasis will shift toward close operations and it is in this shift that CAS significantly enhances the commander's ability to achieve his operational objectives. Unfortunately, unless Army and Air Force doctrines experience a corresponding shift in air warfare strategy, there may always be a shortfall in responsive and effective CAS.

CHAPTER V

QUEST FOR SOLUTIONS

The attitudes, perceptions, and doctrinal shortfalls discussed above raise a warning signal that Army and Air Force CAS doctrine is in disrepair and that rejuvenation is in order. Assume for the moment that a "fix" in service doctrine occurs which elevates CAS in terms of priority. Also assume that this "fix" increases the Army's confidence in the Air Force's ability to provide responsive and effective CAS. The natural fall-out would significantly enhance the CINC's freedom of action. For example, with adequate CAS it would not be unreasonable to assume that the Army could relax its embrace on its huge fleet of rotary wing aircraft and reduce the number of attack helicopters. Predictably, the Army's total "tooth to tail" would decrease substantially, enhance its ability to deploy more rapidly, and simultaneously reduce logistical burdens. This equates to more flexibility for both the CINC and the operational commander.

On the part of the Air Force, a shift in doctrine would permit tactical aircraft currently configured only for AI and BAI to participate in CAS operations. This could lead to a reduction in the number of type aircraft and a corresponding reduction in Air Force "tooth to tail" structure as well. In turn, logistical considerations would become simplified and interoperability between wings would increase. Again the CINC's freedom of action is enhanced. Unfortunately, none of these benefits to the CINC

are likely to occur unless there is a shift in doctrine within both services. Only then will the proper emphasis be placed on CAS in relation to its impact on the overall operation or campaign.

As suggested earlier, there exists two broad solutions which will resolve the CAS debate; CAS can be transferred to the Army which can mold it to suit user needs or CAS can be retained by the Air Force which can overhaul the current system making it more effective and responsive to the user. A vast amount of literature has been written on these alternative paths but invariably, all proposals seek to solve perceived problems in (1) aircraft suitability and effectiveness, (2) communications, (3) command and control, (4) pilot training and attitudes, or any combination thereof. From an operational perspective, some of these proposals have little bearing on a CINC's campaign plan and instead, pivot around budget or structure initiatives. What is pertinent to the operational level of war is that most of these issues could be circumvented by merely adopting a common doctrine which places CAS operations on par with other air warfare operations. The reason is clear. Any doctrine which de-emphasizes CAS operations leaves little motivation for the Army or the Air Force to exploit this means of supporting arms in the scheme of maneuver. This further jeopardizes light forces which rely heavily on this phase of air warfare for fire support.

An example of an existing doctrine which supports light forces with responsive and effective CAS resides in the method in

which the Marine Corps employs aviation. Marine Corps' doctrine views aviation as a supporting arm for ground operations.[1] Simply stated, the six functions (read mission areas) of Marine aviation support the ground scheme of maneuver in one way or another. By focusing in this manner, the number of airborne weapons delivery platforms has been reduced making "light" Marine forces rapidly deployable but still capable of delivering a credible punch. This offers the CINC greater flexibility and increases his freedom of action.

Marines have demonstrated that proper doctrine along with rigorous training tends to defuse most of the CAS issues subject to debate. For example, in the Marine Corps, CAS is conducted by aircraft also capable of performing multi-role missions such as counter air and AI. Marine air and ground commanders have discovered that when aircrews train with their counter-parts on the ground under a doctrine which emphasizes troop support, it matters little which type of aircraft is used for CAS. The support will be there as long as doctrine and training are focused in this direction. The glue which holds this concept together is doctrine, and it is validated by training with success measured in terms of demonstrated combat performance. Committed CAS assets eliminate the ground forces' fear of facing a threat with little or no air support.

The argument is not that the Army or Air Force adopt the Marine Corps' methods for employing aviation. All three services have completely different roles and functions. It is offered

merely as a model from which the Army and Air Force can rethink their doctrine and perhaps improve upon the use of CAS in achieving operational objectives. In so doing, they will discover that dedicated CAS is a concept no different than designating assets for counter air and AI. Redirecting deep strike operations to CAS, when required, would meet much less resistance because the focus would be on achieving operational objectives as a joint, combined arms team and not as a jealously guarded service goal. New meaning would arise to the term "joint" and increased training would occur as a natural fall-out. In the end game, the Air Force would finally make good on its responsibility to provide responsive and effective CAS to the Army.

Some have suggested that if "CAS is the hardest mission [Air Force pilots] have to do", the only thing that requires overhaul is CAS training.[2] There is some validity in this argument and to this end, the Air Force has made great strides in working more closely with the Army on improving CAS. General McPeak's plan to provide dedicated, composite wings in support of Army combat forces will help bond the two services into a more effective joint force team.[3] Briefly outlined, the initiative integrates Air Force and Army forces to enhance training and improve combat interoperability. But the plan is not service wide and only serves as testimony that Air Force intentions are to allocate minimum air warfare assets in support of the Army. So, although the composite wing concept is a step in the right direction, it

will never result in adequate CAS unless a change in doctrine follows.

If the Air Force is unwilling to change its doctrine, the alternative solution is to pass the CAS mission to the Army. Unfortunately, this action would only solve the immediate problem of ensuring that infantrymen receive responsive air support. There are no guarantees that the long term issues of added logistical burdens and increased infrastructure would enhance the CINC's freedom of action. Instead, operational commanders would be bogged down with an even longer "tooth to tail" organization, and CINC's would have to plan for and support a new tar baby amidst the fog of war.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

The need to provide ground forces with effective and responsive CAS becomes more critical as the US increasingly relies on rapid reaction forces. The Air Force on its part has emphasized more training between aircrews and ground forces to improve CAS, and is actively pursuing the composite wing concept. On the other hand, the Army continues to pursue the attack helicopter to provide for shortfalls in adequate CAS. In the aggregate, both routes may increase the war fighting capability of each service but may not necessarily enhance the CINC's freedom of action where the employment of light forces is concerned. Only a change in doctrine will simultaneously increase warfighting capability and offer the operational commander flexibility in employing rapid deployment forces. If the services are unwillingly to recognize this fundamental fact, then the CAS debate will never be completely resolved and the soldier whose "flanks are bare, his rear . . . vulnerable", will always "look aloft with a cautious eye."[1]

The solution is clear; modify doctrine which places more emphasis on CAS. The Marine Corps' doctrine can serve as a launching platform from which the Army and Air Force can develop a more comprehensive doctrine which puts increased emphasis on CAS in the ground scheme of maneuver. This type of doctrine has worked well since the 1920's. Just ask a Marine.

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